

# PRODUCT DATASHEET

## HB 93 W 4000 K 70DEG IP65

HIGH BAY GEN 3 | High-bay luminaires up to 140 lm/W and attractive UGR



PERFOR-  
MANCE  
CLASS

### Areas of application

- Replacement for high bay luminaires with mercury vapor or metal halide lamps
- Warehouses
- Logistics halls
- Industry
- High ceiling (e.g. in shopping malls, airports, commercial buildings, lobbies)

### Product benefits

- Improved UGR compared to previous generations, down to  $UGR \leq 22$  in combination with reflector
- High luminous efficacy
- Energy savings of up to 60 % compared to conventional high bay luminaires
- 5 years guarantee
- Optimized weight and size due to compact design

### Product features

- Different luminous flux and beam angle for mounting heights of ~ 6 m to 14 m in 4000 K or 6500 K



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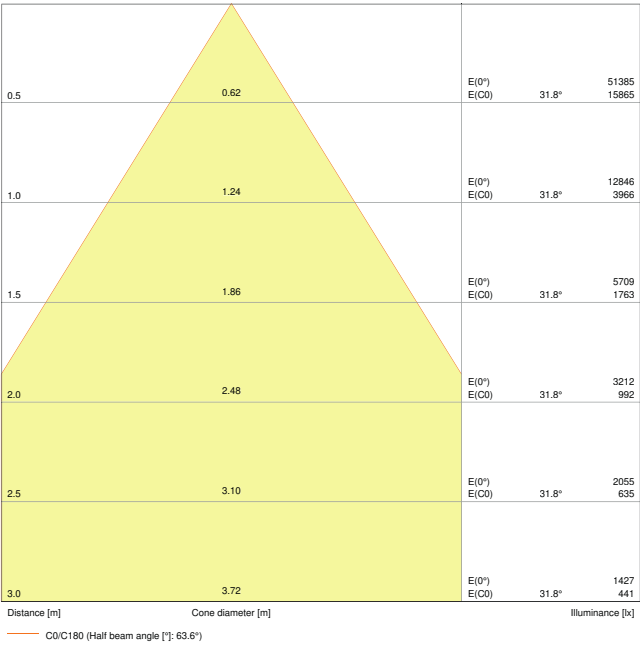
## TECHNICAL DATA

### Electrical data

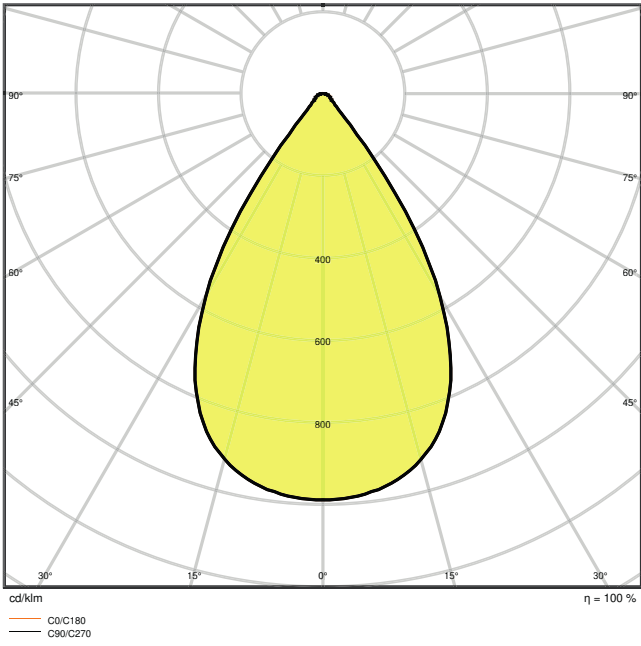
|                                                             |               |
|-------------------------------------------------------------|---------------|
| Nominal wattage                                             | 93.00 W       |
| Nominal voltage                                             | 220...240 V   |
| Mains frequency                                             | 50...60 Hz    |
| Nominal current                                             | 430 mA        |
| Inrush current                                              | 44 A          |
| Inrush current time $T_{h50}$                               | 380 $\mu$ s   |
| Max. number of luminaires per miniature circuit breaker B16 | 6             |
| Max. number of luminaires per miniature circuit breaker C10 | 6             |
| Max. number of luminaires per miniature circuit breaker C16 | 8             |
| Power factor $\lambda$                                      | > 0.95        |
| Total harmonic distortion                                   | $\leq 20$ %   |
| Protection class                                            | I             |
| Operating mode                                              | Mains voltage |

### Photometrical data

|                                              |                      |
|----------------------------------------------|----------------------|
| Luminous flux                                | 13000 lm             |
| Luminous efficacy                            | 140 lm/W             |
| Color temperature                            | 4000 K               |
| Light color (designation)                    | Cool White           |
| Color rendering index Ra                     | $\geq 80$            |
| Standard deviation of color matching         | < 5 sdc <sub>m</sub> |
| Low flicker                                  | Yes                  |
| Photobiological safety group acc. to EN62778 | RG1                  |
| Photobiological safety group acc. to EN62471 | RG1                  |
| Beam angle                                   | 70 °                 |



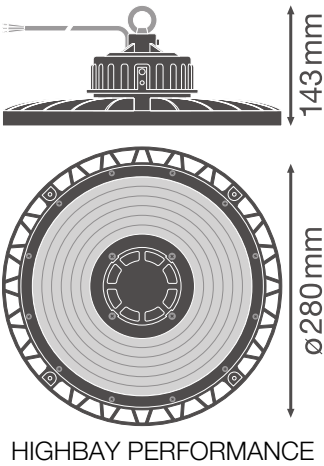
HB PFM 93W4000K 70DEG IP65



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Dimensions & Weight

|                |           |
|----------------|-----------|
| Diameter       | 280.00 mm |
| Height         | 143.00 mm |
| Product weight | 1800.00 g |
| Cable length   | 1500 mm   |



## Materials &amp; Colors

|                                            |                    |
|--------------------------------------------|--------------------|
| Product color                              | Black              |
| Housing color                              | Black              |
| Body material                              | Aluminum           |
| Cover material                             | Polycarbonate (PC) |
| Glow Wire Test according to IEC 60695-2-12 | 850 °C             |
| Mercury content                            | 0.0 mg             |

## Application &amp; Mounting

|                                        |                   |
|----------------------------------------|-------------------|
| Ambient temperature range              | -30...+55 °C      |
| Temperature range at storage           | -40...+70 °C      |
| Type of connection                     | Cable, 3-pole     |
| Type of protection                     | IP65              |
| Protection class IK (shock resistance) | IK08              |
| Dimmable                               | No                |
| Mounting type                          | Suspended/Surface |
| Mounting location                      | Ceiling           |
| Application environment                | Indoor            |
| With light source                      | Yes               |
| Replaceable light source               | No                |

## Lifespan

|                            |                       |
|----------------------------|-----------------------|
| Lifespan L70/B50 at 25 °C  | 80000 h <sup>1)</sup> |
| Lifespan L80/B10 at 25 °C  | 50000 h <sup>1)</sup> |
| Lifespan L80/B50 at 25 °C  | 50000 h               |
| Lifespan L90/B10 at 25 °C  | 35000 h               |
| Number of switching cycles | 200000                |

<sup>1)</sup> t[h]: L70 / B50 @ 25 °C (Ta), t[h]: L80 / B10 @ 25 °C (Ta), t[h]: L90 / B10 @ 25 °C (Ta)

## Control gear

|                             |        |
|-----------------------------|--------|
| ECG - Output ripple current | ≤ 10 % |
|-----------------------------|--------|

## Certificates &amp; Standards

|                                                      |                                |
|------------------------------------------------------|--------------------------------|
| Standards                                            | CE / CB / ENEC / TÜV SÜD / EAC |
| Luminaire with limited surface temperature, "D sign" | Yes                            |
| Replaceable light source (EPREL)                     | Not replaceable                |

## EQUIPMENT / ACCESSORIES

- Mounting hook included
- Mounting brackets, reflectors and refractors available as separate accessory

## DOWNLOAD DATA

| Documents and certificates                                                         |                                        | Document name                        |
|------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------|
|    | User instruction / safety instructions | HIGHBAY Gen3                         |
|    | Legal information                      | LSI_HB_LSR label                     |
|    | Legal information                      | Legal insert HB P GEN 4 AND HB GEN 3 |
|    | Declarations of conformity             | HB                                   |
| Photometric and lighting design files                                              |                                        | Document name                        |
|   | IES file (IES)                         | HB 93W4000K 70DEG IP65               |
|  | LDT file (Eulumdat)                    | HB 93W4000K 70DEG IP65               |
|  | UGR file (UGR table)                   | HB PFM 93W4000K 70DEG IP65           |
|  | Light distribution curve type cone     | HB PFM 93W4000K 70DEG IP65           |
|  | Light distribution curve type polar    | HB PFM 93W4000K 70DEG IP65           |
| CAD/BIM files                                                                      |                                        | Document name                        |
|  | BIM Revit 3D                           | HB GEN3                              |
|  | CAD STEP 3D                            | High Bay gen3 93W                    |

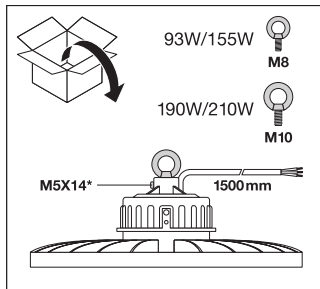
## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4058075452374 | Shipping box<br>1            | 337 mm x 337 mm x 152 mm             | 2497.00 g    | 17.26 dm <sup>3</sup> |

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

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## ADDITIONAL CATALOG INFORMATION



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## References / Links

– For Guarantee see [www.ledvance.com/guarantee](http://www.ledvance.com/guarantee)

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